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EXAMINER

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ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,933

Applicant(s)

KIM ET AL.

Examiner

Kalyan K. Deshpande

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. The following is a final office action in response to the communications received on April 10, 2006. Claims 1-17 and 19-43 are now pending in this application.

Information Disclosure Statement

2. The examiner has reviewed the patents and articles supplied in the Information Disclosure Statements (IDS) provided on October 30, 2002.

Response to Amendments

3. Examiner maintains all previously cited rejections.

Response to Arguments

4. Applicants' arguments filed on April 10, 2006 have been fully considered but they are not found persuasive. Applicants argues i) Bacon fails to teach an "authority manager" and further fails to teach "an administrator which comprises the organization manager, role/group manager, an authority manager, a process manager, and a folder manager", ii) traversal of Examiner's Official Notice for the features "to develop an organization chart that maps the relationships between all participating members in an organization", "a group manager to allocate member information to role and user group information", "an authority manager to allocate authority information to role and user group information", "a security manager to encode and decode information", and "to create a group of human resources and to allocate organizational authority to the human resources group", and iii) Examiner has arrived at the presently claimed subject matter through the use of impermissible hindsight review.

In response to Applicants' argument Bacon fails to teach an "authority manager" and further fails to teach "an administrator which comprises the organization manager, role/group manager, an authority manager, a process manager, and a folder manager", Examiner respectfully disagrees. Bacon does teach an authority manager (see column 4 line 38 – column 5 line 14; where LDAP services and certificate services are used to designate authentication information and enable the authorization of persons to use the system based on their role or whether they belong to a specific group) and further teaches an administrator (see column 5 lines 13-14; where an administration interface enables a supervisor to manage the system) which comprises an organization manager (see column 5 lines 15-19; where LDAP services manage network users in groups of system users and non-system users. This is the same as an organization manager.), role/group manager (see column 4 line 38 – column 5 line 14; where LDAP services and certificate services are used to designate authentication information and enable the authorization of persons to use the system based on their role or whether they belong to a specific group), an authority manager (see column 4 line 38 – column 5 line 14; where LDAP services and certificate services are used to designate authentication information and enable the authorization of persons to use the system based on their role or whether they belong to a specific group), a process manager (see column 4 lines 38-67; where specific workflow engines control the design, use, and management of workflow processes), and a folder manager (see column 4 lines 66-67 and column 5 lines 1-7; where a database is used to store information. A folder manager manages information on a business process, as per Specification page 11.).

Art Unit: 3623

In response to Applicants' traversal of Examiner's Official Notice for the features "to develop an organization chart that maps the relationships between all participating members in an organization", "a group manager to allocate member information to role and user group information", "an authority manager to allocate authority information to role and user group information", "a security manager to encode and decode information", and "to create a group of human resources and to allocate organizational authority to the human resources group", Examiner respectfully submits the taking of official notice on these features is appropriate. Examiner notes the following discussion of Official Notice taken from the MPEP:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241 ("[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention."). A general allegation that the claims define a patentable invention without any reference to the examiner's assertion of official notice would be inadequate. If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate. (MPEP § 2144.03(C))

Applicant has not "specifically point[ed] out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common

Art Unit: 3623

knowledge or well-known in the art.” Applicant’s broad request for references to support Examiner’s statements of Official Notice amounts to nothing more than an unsupported challenge. For these reasons, the features “to develop an organization chart that maps the relationships between all participating members in an organization”, “a group manager to allocate member information to role and user group information”, “an authority manager to allocate authority information to role and user group information”, “a security manager to encode and decode information”, and “to create a group of human resources and to allocate organizational authority to the human resources group” are taken to be admitted prior art because Applicant’s traversal was inadequate. Furthermore, Examiner submits Brodersen et al. (U.S. Patent No. 6850895), Ambler et al. (U.S. Patent No. 6393456), and Rosenthal et al. (U.S. Patent No. 6311192) as evidence to support that Official Notice was properly taken. Brodersen teaches “to develop an organization chart that maps the relationships between all participating members in an organization” (see column 10 lines 59-67 and figures 5 and 8; where positions are defined. Employees are assigned into a position. The position has a parent position, which is the whom the position reports to. This is done all the way until the top of the organization chart, where the top position will not have a parent position.), “a group manager to allocate member information to role and user group information” (see column 10 lines 59-67, column 11 lines 35-60, and figures 5 and 8; where administrators are enabled to enter values and attributes to positions), and “an authority manager to allocate authority information to role and user group information” (see column 10 lines 59-67, column 11 lines 35-60, and figures 5 and 8; where specific

Art Unit: 3623

positions are given specifically authorized views). Ambler teaches "a security manager to encode and decode information" (see column 13 lines 1-8 and column 14 lines 6-23; where for security purposes the workflow system encodes and decodes sensitive information.). Rosenthal teaches "to create a group of human resources and to allocate organizational authority to the human resources group" (see column 3 lines 10-63; where human resources are responsible for employee information and personnel administration including the assignment of employees to a position).

In response to Applicants' argument Examiner has arrived at the presently claimed subject matter through the use of impermissible hindsight review, Examiner respectfully disagrees. It must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Thus Examiner respectfully submits the rendering of claims 14, 16-17, 25, 27, and 32-43 as obvious was done so based on the level of ordinary skill in the art at the time of the invention, as was stated in the original rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 3623

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-13, 19-20, 24, 26, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Bacon et al. (U.S. Patent No. 6430538).

As per claim 1, Bacon teaches:

A workflow management system, for automating a business processes comprising:

A computer (see column 4 lines 15-21; where the hardware of the workflow system are listed. A server (computer) is included in the list.);

An administrator executable by the computer (see column 5 lines 13-14; where an administration interface enables a supervisor to manage the system), wherein the administrator manages automating the business process and comprises an organization manager (see column 5 lines 15-19; where LDAP services manage network users in groups of system users and non-system users. This is the same as an organization manager.), role/group manager (see column 4 line 38 – column 5 line 14; where LDAP services and certificate services are used to designate authentication information and enable the authorization of persons to use the system based on their role or whether they belong to a specific group), an authority manager (see column 4 line 38 – column 5 line 14; where LDAP services and certificate services are used to designate authentication information and enable the authorization of persons to use the system based on their role or whether they belong to a specific group), a process

manager (see column 4 lines 38-67; where specific workflow engines control the design, use, and management of workflow processes), and a folder manager (see column 4 lines 66-67 and column 5 lines 1-7; where a database is used to store information. A folder manager manages information on a business process, as per Specification page 11.);

A process designer executable by the computer, wherein the process designer determines flows and properties of the business process and defines an activity that is performed in the business process (see column 4 lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool.);

A database accessible by both the administrator and the process designer, wherein the database stores organization information, authority information, and folder information (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.);

A process engine executable by the computer, wherein the process engine executes the business process and allocates the activity to the participant, monitors start and end of the activity, and/or interfaces with the database, another workflow engine, and/or a business application program (see column 4 lines 22-38, column 6 line 48 – column 8 line 40, and column 11 line 45 – column

Art Unit: 3623

12 line 60; where a process engine executes business processes and schedules activities to clients. The process definition may include information identifying process start and end requirements.);

A web client, that interfaces with the process engine, the another workflow engine, and/or the business application program, and wherein the web client permits a user to interact with the system (see column 6 line 48 – column 8 line 40; where the workflow management system has a web interface allowing clients (users) to interact with the system.); and

A form generator executable by the computer, wherein the form generator designs and operates an electronic form related to the business process, and wherein the form generator interfaces with the database, the process designer, the process engine, the web client, and/or the business application program (see column 4 lines 21-65 and column 6 line 48 – column 8 line 40; where the system includes a browser and a java applet. The java applet allows for the user of graphic objects, data input cells, and access to the database. A form generator supports the various kinds of graphic objects, data input cells, graphic signatures, automatic calculations, database access and programming scripts (see Specification page 16). The java applet is a form generator.).

As per claim 2, Bacon teaches:

The workflow management system of claim 1,

Art Unit: 3623

Wherein the organization manager creates, deletes, and maintains information about a department associated with the business process (see column 5 lines 1-22; where LDAP services control directory services.);

Wherein the role/group manager creates, deletes, and maintains information about a role and a user group associated with the business process (see column 5 lines 1-22; where LDAP services control director services.);

Wherein the authority manager creates, deletes, and maintains information about an authority that can access the business process application program, and wherein the authority manager further allocates the authority information to the information about the role, the group and a member of at least one of the department and the user group (see column 5 lines 1-22; where LDAP services and certificate services together provide directory information and authority information and access to the system.); and

Wherein the folder manager creates, deletes, and maintains information about a folder (see column 4 line 22 – column 5 line13; where the system uses a database to store process definitions. This database serves as a process manager and folder manager. A folder manager contains information regarding business processes (see Specification page 11).

As per claim 3, Bacon teaches:

The workflow management system of claim 2, further comprising an object manager, wherein the object manager interfaces the administrator with the database

Art Unit: 3623

(see column 5 line 23 – column 6 line 3; where an object database management group is used to connect the administrator to the database.).

As per claim 4, Bacon teaches:

The workflow management system of claim 3, wherein the database further comprises:

An organization database (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.);

Authority database (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.); and

A folder database (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.).

As per claim 5, Bacon teaches:

The workflow management system of claim 1, wherein the process designer comprises:

A graphic designer executable by the computer that creates and designs and activity and the business process using a graphical user interfaces (see column 4

lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool.); and

A property designer executable by the computer that defines a property of the activity to be executed in the business process (see column 4 lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool.).

As per claim 6, Bacon teaches:

The workflow management system of claim 5, wherein the property designer further comprises an object manager that interfaces the designer with the database (see column 5 line 23 – column 6 line 3; where an object database management group is used to connect the application services to the database, including the process definition tool.).

As per claim 7, Bacon teaches:

The workflow management system of claim 6, wherein the database comprises:

A process definition folder that contains information related to the business process modeling (see column 4 line 22 – column 5 line 22; where a process definition tool creates process definitions based on business process modeling and stores the workflows in a database.);

A data folder that contains data generated by the business process execution (see column 4 line 22 – column 5 line 22; where a process definition tool creates

Art Unit: 3623

process definitions based on business process modeling and stores the workflows in a database.); and

an organization folder (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.).

As per claim 8, Bacon teaches:

The workflow management system of claim 1, wherein the web client further comprises:

A worklist handler (see column 6 line 48 – column 8 line 40; where the server schedules an activity for a client. The scheduled activity is sent to the client's inbox. The activity is also part of the process definition which is stored in the application's database. A worklist handler is a list of activities scheduled to a participant of the system (see Specification page 8).);

A workitem handler (see column 4 lines 58 - 65; where an agent is responsible for automatically implementing a given activity. A workitem handler is a handler that automatically executes activities (see Specification page 9). Therefore, a workitem handler and an agent are the same.); and

A process monitor (see column 4 lines 38-65; where the server includes engines that determine the status of the process.).

As per claim 9, Bacon teaches:

The workflow management system of claim 8, wherein the worklist handler maintains a work list for a user (see column 6 line 48 – column 8 line 40; where the server schedules an activity for a client. The scheduled activity is sent to the client's in-box. The activity is also part of the process definition which is stored in the application's database. A worklist handler is a list of activities scheduled to a participant of the system (see Specification page 8).).

As per claim 10, Bacon teaches:

The workflow management system of claim 9, wherein the workitem handler supports execution of the business process (see column 4 lines 58 - 65; where an agent is responsible for automatically implementing a given activity. A workitem handler is a handler that automatically executes activities (see Specification page 9). Therefore, a workitem handler and an agent are the same.).

As per claim 11, Bacon teaches:

The workflow management system of claim 10, wherein the process monitor checks status of the business process (see column 4 lines 38-65; where the server includes engines that determine the status of the process.).

As per claim 12, Bacon teaches:

The workflow management system of claim 11, wherein the process monitor further checks a history of the business process and current progress of the business process (see column 4 lines 38-65; where the server includes engines that determine the status of the process. The server determines which activities has been completed and which activities are ready to be started.).

As per claim 13, Bacon teaches:

The workflow management system of claim 12, wherein the process monitor further monitors resource utilization (see column 4 lines 38-65; where the server includes engines that determine the status of the process. These status updates are received by monitoring various resources, including agents and clients. The server determines which activities has been completed and which activities are ready to be started. Upon determination that an activity can be started, the server routes an activity to the appropriate resources for performance.).

As per claim 19, Bacon teaches:

The workflow management system of claim 5, wherein the property designer creates, deletes, and maintains a business rule associated with the business process (see column 4 lines 22-28 and column 11 line 46 – column 12 line 60; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool. The workflow items can have rules associated with them as described by the sample code provided.).

As per claim 20, Bacon teaches:

The workflow management system of claim 19, wherein the business rule includes information that defines a term associated with the business process, defines a condition associated with the business process, and/or defines a transition path to be used when the activity is completed (see column 4 lines 22-28 and column 11 line 46 – column 12 line 60; where a process definition tool is used to

Art Unit: 3623

create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool. The workflow items can have rules associated with them as described by the sample code provided.).

As per claim 24, Bacon teaches:

The workflow management system of claim 1, wherein the process engine comprises:

An interface agent that interchanges information about a status of the business process with other process engines (see column 4 lines 38-65; where the server includes engines that determine the status of the process.).

A request manager that receives requests from the user, directs the process engine to handle the requests, and return results to the user (see column 6 line 48 – column 7 line 25; where the server handles all of the client requests and returns the appropriate information to the clients.);

A dispatcher that retrieves and executes the requests and stores results in the database (see column 6 line 48 – column 7 line 25; where the server handles all of the client requests and returns the appropriate information to the clients. The dispatcher executes the client requests (see Specification page 34). This is the same as the server executing client requests.);

A scheduler (see column 4 lines 38-65; where the server schedules activities based on available resources and readiness of the activity to be performed.);

Art Unit: 3623

A security manager that controls a certification process with an outside certification server (see column 5 lines 15-22; where certification services provides certificates used for authentication.); and

A database broker that interfaces with the process engine and the database (see column 5 line 23 – column 6 line 3; where an object database management group is used to connect the administrator to the database.).

As per claim 26, Bacon teaches:

The workflow management system of claim 24, wherein the scheduler manages a deadline of the activity and/or a waiting state of the activity (see column 4 lines 38-65; where the server includes engines that determine the status of the process. Only upon determination that the activity is ready to be performed does the server move the process forward. Until then, the process is in a waiting state.).

As per claim 28, Bacon teaches:

The workflow management system of claim 25, wherein the activity transits among the states according to a business rule (see column 4 lines 39-65; where the server determines which resources to schedule the activity to. This is done in accordance to the process definition.).

As per claim 29, Bacon teaches:

The workflow management system of claim 28, wherein the process engine controls the workflow using a transition count to keep the transitions between activity states consistent with the business rule (see column 9 line 1 – column 11 line 45; where the process engine controls the workflow as it progresses between work

items. The transition count is a method to determine to validate the business process is flowing according to the business rule (see Specification page 37). The Bacon system uses an expression to determine the corresponding work item. The decision agent renders a Boolean value of true (1) or false (0) based on the expression. This ensures that the processes is flowing within the rules of the process definition.).

As per claim 30, Bacon teaches:

The workflow management system of claim 29, wherein the process engine sets to zero the transition counts of all the transitions that can be processed in a forward direction from the activity, when the activity is started (see column 9 line 1 – column 11 line 45; where the process engine controls the workflow as it progresses between work items. The transition count is a method to determine to validate the business process is flowing according to the business rule (see Specification page 37). The Bacon system uses an expression to determine the corresponding work item. The decision agent renders a Boolean value of true (1) or false (0) based on the expression. This ensures that the processes are flowing within the rules of the process definition.).

As per claim 31, Bacon teaches:

The workflow management system of claim 30, wherein the process engine further sets to one the transition counts of the transitions stemming from execution of the activity, when the activity is completed (see column 9 line 1 – column 11 line 45; where the process engine controls the workflow as it progresses between work

Art Unit: 3623

items. The transition count is a method to determine to validate the business process is flowing according to the business rule (see Specification page 37). The Bacon system uses an expression to determine the corresponding work item. The decision agent renders a Boolean value of true (1) or false (0) based on the expression. This ensures that the processes are flowing within the rules of the process definition.).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 14, 16, 17, 25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon et al. (U.S. Patent No. 6430538).

As per claim 14, Bacon teaches:

The workflow management system of claim 2, wherein the organization manager further creates, deletes and maintains information regarding client information as dictated by the LDAP directory services (see column 5 lines 8 – 22; where LDAP services maintain directory services for the organization.).

Bacon fails to teach:

i) information about relationships between the department, rank of a member in the department and/or user group, and ii) information regarding the member in the department and/or user group.

It is old and well-known in the art to develop an organization chart that maps the relationships between all participating members in an organization. The advantage of developing an organization chart is that such data clearly defines responsibilities of each member and defines who is ultimately responsible for each activity. Another advantage to defining an organization chart is to determine access and privilege levels for each member using the system. Thus, a supervisor can easily see the activities assigned to his subordinates. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to develop an organization chart containing information regarding the relationship between the department and rank of a member in a department and incorporate this information to the Bacon system in order to clearly define the responsibilities of each participating member and determine ultimately who is responsible for each activity.

As per claim 16, Bacon teaches:

The workflow system of claim 2, wherein the LDAP directory services contain member, role and user group information (see column 5 lines 8 – 22; where LDAP services maintain directory services for the organization.).

Bacon fails to teach:

wherein the role/group manager allocates the member information to the role information and the user group information.

It is old and well-known in the art for a group manager to allocate member information to role and user group information. The advantage of allowing a group manager to allocate member information is that management of the workflow process

Art Unit: 3623

have clear information as to the skills necessary to perform the activity and the skills of the members of their organization. Thus a group manager would be the ideal person to allocate the member information to the role information. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to assign a group manager the responsibility of allocating the member information to the role information in order to have the most qualified person in the organization to perform this activity actually perform the activity.

As per claim 17, Bacon teaches:

The workflow management system of claim 2, where in the LDAP directory services and certificate services contain information regarding the role, group and member of the department (see column 5 lines 8 – 22; where LDAP services maintain directory services for the organization.).

Bacon fails to teach:

the authority manager allocates the authority information to information about the role, the group and the member of the department and/or the user group.

It is old and well-known in the art for an authority manager to allocate authority information to role and user group information. The advantage of allowing an authority manager to allocate authority information is that management of the workflow process have clear information as to the skills necessary to perform the activity and the skills of the members of their organization. Thus an authority manager would be the ideal person to allocate the authority information to the role information. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to assign an

Art Unit: 3623

authority manager the responsibility of allocating the authority information to the role information in order to have the most qualified person in the organization to perform this activity actually perform the activity.

As per claim 25, Bacon teaches:

The workflow management system of claim 24, wherein the process engine allocates the activity to the participant and a status of the activity is monitored by the process engine (see column 4 lines 38-65; where the server includes engines that determine the status of the process. These status updates are received by monitoring various resources, including agents and clients. The server determines which activities have been completed and which activities are ready to be started. Upon determination that an activity can be started, the server routes an activity to the appropriate resources for performance.).

Bacon fails to teach:

The workflow management system of claim 24, wherein the process engine allocates the activity to the participant and a status the activity comprises one of a state selected from the group consisting of: an initial state; a waiting state; a dead state; a running state; a suspended state; a completed state; a terminated state; an error state; and an overdue state.

Bacon teaches determining the status of a process in a workflow management system. Bacon does not expressly teach the specific data recited in claim 25; however, these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural

Art Unit: 3623

elements. The recited method steps would be performed the same regardless of the specific data. Further, the structural elements remain the same regardless of the specific data. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP § 2106.

As per claim 27, Bacon teaches:

The workflow management system of claim 24, where in security mechanisms are provided to ensure authentic data (see column 8 lines 44-67; where security mechanisms are provided to protect against eavesdropping and to ensure work items are authentic.).

Bacon fails to teach:

the security manager further encodes and decodes information.

It is old and well-known in the art for a security manager to encode and decode information. The advantage of encoding and decoding information is that it renders data ready to be transferred over the internet. Encoding and decoding can also provide an additional layer of security. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to incorporate encoding and decoding scripts to the Bacon system in order to render data ready to transfer of the internet and provide an additional layer of security to the data.

As per claim 32, Bacon teaches:

A method for automating a business process, the method comprising steps of:

Defining an activity that is performed in the business process (see column 4 lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool.);

Accessing, from a database, organization information, authority information, and/or folder information relating to the business process (see column 4 line 66 – column 5 line 22; where a database stores process information (folder information) and an LDAP database stores directory and organization information. The certification services contain and control authentication information.);

Executing the business process, wherein the step of executing the business process includes allocating the activity to a participant, and designing and creating an electronic form related to the business process (see column 4 lines 22-38, column 6 line 48 – column 8 line 40, and column 11 line 45 – column 12 line 60; where a process engine executes business processes and schedules activities to clients. The process definition may include information identifying process start and end requirements.); and

Monitoring the business process, wherein the step of monitoring the business process comprises monitoring a start and end of the activity, facilitating storing a result of the activity, and/or interfacing with a workflow program and/or business application program (see column 4 lines 38-65; where the server includes

Art Unit: 3623

engines that determine the status of the process. The server determines which activities have been completed and which activities are ready to be started.).

Bacon fails to teach:

Modeling the business process, wherein the step of modeling includes generating an organization chart;

Claim 32 recites limitations already addressed by the rejection of claim 14, 16, and 17; therefore the same rejection applies to this claim.

As per claim 33, Bacon fails to teach:

Mapping at least one departments, members, member titles and member roles to generating the organization chart;

Creating a role; and

Allocating an authority to the role;

Claim 33 recites limitations already addressed by the rejection of claims 14, 16, and 17; therefore the same rejection applies to this claim.

As per claim 34, Bacon fails to teach:

Mapping at least one of departments, members, member titles, and member roles to generate the organization chart;

Creating a group of human resources; and

Allocating an authority to the group of human resources.

Claim 34 recites the limitation "Mapping at least one of departments, members, member titles, and member roles to generate the organization chart". This limitation is

Art Unit: 3623

already addressed by the rejection of claims 14, 16, 17, and 33; therefore the same rejection applies.

It is old and well-known in the art to create a group of human resources and to allocate organizational authority to the human resources group. The traditional functions of human resource groups include creation of roles, job descriptions, and providing authorization information regarding the members to necessary work groups. The advantages of allocating the human resources group this authority are that all member information will be in a consolidated area and will be confidential from other groups. It would have been obvious, at the time of the invention, to one of ordinary skill in the art to create a human resources group and allocate an authority to this group in order to consolidate member information and maintain this information in confidentiality from other work groups.

As per claim 35, Bacon teaches:

The method of claim 32, wherein the step of designing a process further comprises:

Identifying an activity to be executed (see column 4 lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process definition tool.); and

Allocating a property to the activity (see column 4 lines 22-28; where a process definition tool is used to create and design workflows. The workflows consist of a plurality of activities and these activities are defined by the process

Art Unit: 3623

definition tool. Specific properties to the activities, such as start and end times, can be associated to the activities.).

As per claim 36, Bacon teaches:

The method of claim 32, wherein the step of designing a process further comprises:

A start activity that starts a process (see column 6 lines 48-65 and column 9 lines 1-13; where the server sends the client a work item to initiate the process. Furthermore, workflows are defined by start points and end points.);

A normal activity that involves an intervention by a participant(see column 6 lines 48-65; where the server sends the client a work item to initiate the process.);

A wait activity (see column 6 line 48 – column 7 line 9; where the process waits until the client selects the work item. Once the client selects the item, the process is ready to begin.);

A mail activity(see column 6 lines 48-65; where the server sends the client a work item to initiate the process. The client receives the work item in his in-box.);

An SQL activity that accesses an application database (column 7 lines 10-25; where the application queries a database (using SQL) to retrieved client requested objects.);

A sub-process activity that comprises a plurality of separate activities (see column 8 lines 44-67; where distributed subflows are used.);

Art Unit: 3623

An agent activity that automatically activates a program (see column 4 lines 58 - 65; where an agent is responsible for automatically implementing a given activity.);

A connector activity (see column 5 line 23 – column 6 line 3; where an object database management group is used to connect the application services to the database, including the process definition tool.); and

An end activity that represents an end of the process (see column 8 lines 16-40 and column 9 lines 1-13; where a step is necessary to end the activity. The flow engine determines if there is a subsequent step for the process and if not, ends the process. Furthermore, workflows are defined with start points and end points.).

As per claim 37, Bacon teaches:

The method of claim 35, wherein the property comprises:

Participant information that describes an individual that executes the activity (see column 9 lines 14-67; where personal subflows are specifically assigned to a single actor known actor.);

Application information that describes a business application to be used by the individual to execute the activity (see column 10 lines 1-16; where the server loads the appropriate application within the java applet for the client to execute. In another frame, the server can load controls for the user to navigate.);

Art Unit: 3623

Post-condition information that determines when the activity is completed (see column 10 lines 17-40; where the server uses a decision point agent to determine if the activity is complete.);

A schedule information that describes the planning of the activity (see column 4 lines 22-57 and column 9 lines 51-67; where the appropriate work item is routed to the defined participant. The activity planning is done with the process definition tool.);

Deadline information that describes timing for executing the activity (see column 4 lines 22-57 and column 9 lines 1-19; where each activity has a start point and an end point. The process definition tool can also associated start and end times to activities.);

Sub-process information that describes a location and an option of the sub-process activity (see column 9 line 1 – column 10 line 54; where sub-process information is determined as personal subflows. The personal subflows have start points and end points with handlers to return the personal subflow back to the business process flow.);

Parameter information that defines a value necessary for executing a program in an agent activity (see column 10 lines 14-40; where a decision agent uses parameters in the work item to determine if the activity is complete and the server determines what the subsequent activity should be.);

Art Unit: 3623

Mail-to information that determines a recipient of email in the mail activity (see column 6 lines 48-67 and column 9 lines 51-67; where the server mails the client the next work item.);

Mail content information that represents the content of email in the mail activity (see column 6 lines 48-67 and column 9 lines 51-67; where the server mails the client the next work item.);

General information that shows a name and description of the activity (see column 10 lines 17-27; where a naming convention names each work item in order to identify the stage of the process.);

Transition condition information that represents conditions for an input transition and an output transition (column 10 lines 1-40; where transition information is determined. The condition to transfer a work item from one activity to the next is determined by a Boolean value of true or false. If this condition is satisfied, the work item is routed to the subsequent activity.); and

Icon information to display an icon on a graphical user interface (see column 4 lines 21-38; where the process definition tool uses a graphical user interface (GUI) to develop the process workflow. The GUI contains icons that represent different steps and activities for the developer to use.).

As per claim 38, Bacon teaches:

The method of claim 35, wherein the participant can comprise one of or any combination of a user, a department and the role (see column 5 lines 23-48; where

Art Unit: 3623

work items can be associated with several participants, including a work group, for load balancing or group functions.).

As per claim 39, Bacon teaches:

The method of claim 38, wherein the participant can be a manager of a participant (see column 5 lines 23-48; where work items can be associated with several participants, including a work group, for load balancing or group functions.).

As per claim 40, Bacon teaches:

The method of claim 38, wherein the participant can be a peer of the participant (see column 5 lines 23-48; where work items can be associated with several participants, including a work group, for load balancing or group functions.).

As per claim 41, Bacon teaches:

The method of claim 38, wherein the participant can be a department of the participant (see column 5 lines 23-48; where work items can be associated with several participants, including a work group, for load balancing or group functions.).

As per claim 42, Bacon teaches:

The method of claim 38, wherein activity is allocated based on a workload of the participants (see column 5 lines 23-48; where work items can be associated with several participants, including a work group, for load balancing or group functions.).

As per claim 43, Bacon teaches:

The method of claim 32, wherein generating an organization chart comprises mapping information about a department, a member name, a member title, and a member role.

Claim 43 recites limitations already addressed by the rejection of claims 14, 16, and 17; therefore the same rejection applies to this claim.

9. Claims 15 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bacon et al. (U.S Patent No. 6430538) and further in view of Berg et al. (U.S. Patent No. 5999911).

As per claim 15, Bacon fails to teach:

The organization manager further registers a signature of each member of the department and/or user group.

Berg teaches:

The organization manager further registers a signature of each member of the department and/or user group (see column 21 lines 58-67; where the workflow manager stamps the username and comment to uniquely identify each create instances.).

Bacon teaches a workflow management system that allows for a graphical design of the workflow and a web interface for clients to use. Berg also teaches a workflow system that allows for a graphical design of the workflow and provides real time status of the workflow. The advantage of registering a signature is that it provides a unique identifier for items created by that user. It would have been obvious, at the time of the invention, to combine these references because they disclose inventions in the same art and attempt to improve the management of workflow within an organization. Therefore, it would have been obvious, at the time of the invention, to

combine the signature feature of the Berg system to the Bacon system in order to provide unique identifiers to the system.

As per claim 21, Bacon fails to teach:

The process designer further comprises a check-out table.

Berg teaches:

The process designer further comprises a check-out table (see column 7 line 63 – column 8 line 9; where concurrent access to the workflow instance database is subject to a system of locking files. If a user is working on a workflow instance file, the system marks the file as lock so that no other user can modify the file while another user is modifying it.).

The advantages of using a file locking system are that files are not overwritten by other users while a user is modifying that file. A file locking system also provides a history of modifications to the file. It would have been obvious, at the time of the invention, to incorporate the file locking feature of the Berg system to the Bacon system in order to prevent workflow definitions from being overwritten by other users while a user is modifying that file.

As per claim 22, Bacon fails to teach:

The check-out table contains information on a process model currently checked-out by a user.

Berg teaches:

The check-out table contains information on a process model currently checked out by a user (see column 7 line 63 – column 8 line 9; where concurrent access to

Art Unit: 3623

the workflow instance database is subject to a system of locking files. If a user is working on a workflow instance file, the system marks the file as lock so that no other user can modify the file while another user is modifying it.).

Claim 22 recites limitations already addressed by the rejection of claim 21; therefore the same rejection applies to this claim.

As per claim 23, Bacon fails to teach:

The system keeps a currently checked-out process model from being simultaneously checked-out by another user by referring to the check-out table.

Berg teaches:

The system keeps a currently checked out process model from being simultaneously checked-out by another user by referring to the check-out table (see column 7 line 63 – column 8 line 9; where concurrent access to the workflow instance database is subject to a system of locking files. If a user is working on a workflow instance file, the system marks the file as lock so that no other user can modify the file while another user is modifying it.).

Claim 23 recites limitations already addressed by the rejection of claim 21; therefore the same rejection applies to this claim.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571)272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

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